

# SHARP SERVICE MANUAL

No. 00ZFO5700USME



Illustration: FO-5700

## FACSIMILE

### MODEL FO-5700

In this Service Manual for FO-5700U which is provided with 2nd. cassette (FO-47UC) and memory PWB (FO-1MK), only the information which differs from that for FO-4700U/FO-47UC already issued is contained. For the information not contained, refer to the Service Manual for FO-4700U/FO-47UC (00ZFO4700USME) and FO-1MK (00ZFO1MKCUSME).

#### Difference between FO-4700U and FO-5700U

	FO-4700U	FO-5700U
2nd. cassette	OPTION (FO-47UC)	STANDARD EQUIPMENT
Memory PWB	OPTION (FO-1MK)	STANDARD EQUIPMENT
Control PWB unit	DCEKC082MXHZZ	DCEKC489MXHZZ

#### CAUTION

This laser facsimile is a class 1 laser product that complies with 21CFR 1040.10 and 1040.11 of the CDRH or IEC60825-1 standard. This means that this machine does not produce a hazardous laser radiation. The use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This laser radiation is not a danger to the skin, but when an exact focusing of the laser beam is achieved on the eyes retina, there is danger of spot damage to the retina.

The following cautions must be observed to avoid exposure of the laser beam to your eyes at the time of servicing.

- 1) When a problem in the laser optical unit has occurred, the whole optical unit must be exchanged as a unit, not an individual part.
- 2) Do not look into the machine with the main switch turned on after removing the toner/developer unit and drum cartridge.
- 3) Do not look into the laser beam exposure slit of the laser optical unit with the connector connected when removing and installing the optical system.
- 4) The cover of Laser Printer Unit contains the safety interlock switch.

Do not defeat the safety interlock by inserting wedges or other items into the switch slot.

Laser Wave Length : 770-810 nm  
 Laser Pulse Times : 49.2  $\mu$ s  
 Laser Output Power : 0.37 mW

Parts marked with " $\triangle$ " is important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

**CAUTION FOR BATTERY REPLACEMENT**

- (Danish)                      ADVARSEL !  
Lithiumbatteri-Eksplosionsfare ved fejlagtig håndtering.  
Udskiftning må kun ske med batteri  
af samme fabrikat og type.  
Levér det brugte batteri tilbage til leverandoren.
- (English)                      Caution !  
Danger of explosion if battery is incorrectly replaced.  
Replace only with the same or equivalent type  
recommended by the equipment manufacturer.  
Discard used batteries according to manufacturer's instructions.
- (Finnish)                      VAROITUS  
Paristo voi räjähtää, jos se on virheellisesti asennettu.  
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan  
tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden  
mukaisesti.
- (French)                      ATTENTION  
Il y a danger d'explosion s' il y a remplacement incorrect  
de la batterie. Remplacer uniquement avec une batterie du  
même type ou d'un type recommandé par le constructeur.  
Mettre au rebut les batteries usagées conformément aux  
instructions du fabricant.
- (Swedish)                      VARNING  
Explosionsfare vid felaktigt batteribyte.  
Använd samma batterityp eller en ekvivalent  
typ som rekommenderas av apparattillverkaren.  
Kassera använt batteri enligt fabrikantens  
instruktion.
- (German)                      Achtung  
Explosionsgefahr bei Verwendung inkorrektter Batterien.  
Als Ersatzbatterien dürfen nur Batterien vom gleichen Typ oder  
vom Hersteller empfohlene Batterien verwendet werden.  
Entsorgung der gebrauchten Batterien nur nach den vom  
Hersteller angegebenen Anweisungen.

## CONTENTS

**CHAPTER 1. GENERAL DESCRIPTION**

[1] Specifications .....	1-1
[2] Refer to the service manual of FO-4700U/FO-47UC	
[3] Refer to the service manual of FO-4700U/FO-47UC	
[4] Refer to the service manual of FO-4700U/FO-47UC	
[5] Refer to the service manual of FO-4700U/FO-47UC	

**CHAPTER 2. ADJUSTMENTS**

[1] Adjustments .....	2-1
[2] Diagnostics and service soft switches .....	2-2
[3] Troubleshooting .....	2-35
[4] Error code table .....	2-36

**CHAPTER 3. MECHANICAL DESCRIPTION**

[1] Refer to the service manual of FO-4700U/FO-47UC	
[2] Refer to the service manual of FO-4700U/FO-47UC	
[3] Refer to the service manual of FO-4700U/FO-47UC	
[4] How to install the verification stamp (FO-45VS) refer to the service manual supplement of FO-4700U/FO-47UC	

**CHAPTER 4. DIAGRAMS**

[1] Block diagram .....	4-1
[2] Wiring diagram .....	4-2
[3] Point-to-point diagram and connector signal name .....	4-3

**CHAPTER 5. CIRCUIT DESCRIPTION**

[1] Circuit description .....	5-1
[2] Circuit description of control PWB .....	5-1
[2-1] Circuit description of memory PWB .....	5-19
[3] Refer to the service manual of FO-4700U/FO-47UC	
[4] Refer to the service manual of FO-4700U/FO-47UC	
[5] Refer to the service manual of FO-4700U/FO-47UC	
[6] Refer to the service manual of FO-4700U/FO-47UC	

**CHAPTER 6. CIRCUIT SCHEMATICS AND PARTS LAYOUT**

[1] Control PWB circuit .....	6-1
[2] LIU PWB circuit .....	6-19
[3] Printer PWB circuit .....	6-21
[4] Power supply PWB circuit .....	6-25
[5] Operation panel PWB circuit .....	6-27
[6] High voltage PWB circuit .....	6-29
[7] Toner empty PWB circuit .....	6-31
[8] 2nd. cassette PWB circuit .....	6-32
[9] Memory PWB circuit .....	6-34

**CHAPTER 7. OPERATION FLOWCHART**

[1] Refer to the service manual of FO-4700U/FO-47UC	
[2] Refer to the service manual of FO-4700U/FO-47UC	

**CHAPTER 8. OTHERS**

[1] Refer to the service manual of FO-4700U/FO-47UC	
[2] Refer to the service manual of FO-4700U/FO-47UC	

PARTS GUIDE

# CHAPTER 1. GENERAL DESCRIPTION

## [1] Specifications

### • GENERAL

<b>Automatic dialing</b>	Rapid Key Dialing: 48 numbers Speed Dialing: 100 numbers	<b>Effective Scanning width</b>	8.3" (210 mm) max.
<b>Memory size*</b>	2 MB (approx. 116 pages with ECM off)	<b>Effective Printing width</b>	8.0" (203 mm) max.
<b>Modem speed</b>	33,600 bps (max.) Automatic fallback to lower speeds.	<b>Reception modes</b>	Auto/Manual
<b>Transmission time*</b>	Approx. 2 seconds	<b>Instascan speed</b>	30 ppm (letter paper)
<b>Toner cartridge yield (4% page coverage)</b>	<b>Initial starter cartridge</b> (included with fax machine): 3000 pages (avg.) (letter paper) <b>Replacement cartridge (FO-47ND):</b> 6000 pages (avg.) (letter paper)	<b>Full Dual Access</b>	Yes
<b>Drum cartridge yield</b>	<b>Initial starter cartridge</b> (included with fax machine): 20,000 pages (avg.) <b>Replacement cartridge (FO-47DR):</b> 20,000 pages (avg.)	<b>Copy function</b>	Single/Multi/Sort (99 copies/page)
<b>Resolution</b>	<b>Horizontal:</b> 203 pels/inch (8 pels/mm) <b>Vertical:</b> Standard: 98 lines/inch (3.85 lines/mm) Fine /Halftone: 196 lines/inch (7.7 lines/mm) Super fine: 391 lines/inch (15.4 lines mm)	<b>Power requirements</b>	120 V AC, 60 Hz
<b>Automatic document feeder</b>	50 pages max. (20 lb letter paper)	<b>Operating temperature</b>	50 - 86°F (10 - 30°C)
<b>Paper capacity</b>	750 sheets (tray and cassette)	<b>Humidity</b>	20 to 85% RH
<b>Compression scheme</b>	MMR, MR, MH, Sharp (H2) (Also supports JBIG)	<b>Power consumption</b>	Standby: 12 W Maximum: 580 W
<b>Halftone (grayscale)</b>	64 levels	<b>Dimensions</b>	Width: 18.1" (460 mm) Depth: 15.2" (385 mm) Height: 15.4" (390 mm)
<b>Applicable telephone line</b>	Public switched telephone network	<b>Weight</b>	Approx. 41.0 lbs.(18.6kg)
<b>Compatibility</b>	ITU-T (CCITT) G3 mode	* Based on ITU-T (CCITT) Test Chart #1 at standard resolution in Sharp special mode, excluding time for protocol signals (i.e., ITU-T phase C time only).	
<b>Printing resolution</b>	<b>Horizontal:</b> 406 lines/inch (16 lines/mm) <b>Vertical:</b> 391 lines/inch (15.4 lines/mm) <b>PC Printing:</b> 600 dpi	<b>Option</b>	
<b>Input document size</b>	Automatic feeding: Width: 5.8 to 10.1" (148 to 256 mm) Length: 5.0 to 14.3" (128 to 364 mm) Manual feeding: Width: 5.8 to 11.0" (148 to 279 mm) Length: 5.0 to 17.0" (128 to 432 mm)	<b>Toner cartridge</b>	: FO-47ND
		<b>Drum cartridge</b>	: FO-47DR
		<b>PC interface</b>	: FO-47IF
		<b>Option memory</b>	: FO-3MK
		<b>Verification stamp</b>	: FO-45VS

**Note:** This facsimile machine is Year 2000 compliant.

### <IMPORTANT PLEASE READ FIRST>

To avoid problems with supplies, please don't use supplies from other units. Please use new supplies, when supply changes are required.